

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claim 1 (Currently Amended): A sleeve for arrangement in a connector between an optical fiber and a transmitting or receiving module for optically connecting the optical fiber and the transmitting or receiving module, said sleeve comprising:

a body containing a portion defining a light-leading path of frusto-conical shape having a side portion, and a small-diameter end face for facing the transmitting or receiving module;

an outer tube portion disposed concentrically spaced with respect to the light-leading path and being substantially coextensive therewith; and

an integrally formed peripheral projecting portion of said sleeve extending radially from said side portion of the light-leading path between and interconnecting the outer tube portion and the periphery side portion of the light-leading path thereof.

Claim 2 (Original): The sleeve as set forth in claim 1, wherein
the peripheral projecting portion is circularly formed coaxially with the light-leading path,
and
the outer tube portion is cylindrically formed coaxially with the light-leading path.

Claim 3 (Previously Amended): The sleeve as set forth in claim 2, wherein an outside diameter of the outer tube portion is substantially uniform over an entire length of the light-leading path.

Claim 4 (Previously Amended): The sleeve as set forth in claim 1, wherein the outer tube portion has a flange projecting annularly in a radial direction from a peripheral surface thereof.

Claim 5 (Previously Amended): The sleeve as set forth in claim 1, including a convex lens formed integrally with said light-leading path for extending toward the optical fiber.

Claim 6 (Previously Amended): The sleeve as set forth in claim 5, wherein the lens has an axial length not greater than an optical fiber side end of the outer tube portion.

Claim 7 (Previously Amended): The sleeve as set forth in claim 1, wherein an end face of said light-leading path opposite said small diameter end face is a light-receiving surface for receiving light transmitted by an optical fiber, and a diameter of the light-receiving surface is larger than a diameter of a light-emitting surface at an end face of an optical fiber.

Claim 8 (Previously Amended): The sleeve as set forth in claim 1, wherein the small-diameter end face of the light-leading path is a light-emitting surface to emit light transmitted to a receiving module, and a diameter of the light-emitting surface is smaller than a diameter of a light-receiving surface of the receiving module.

Claim 9 (Previously Amended): The sleeve as set forth in any one of claims 1-6, wherein the small-diameter end face of the light-leading path is a light-receiving surface for receiving light transmitted from a transmitting module, and a diameter of the light-receiving surface is larger than a diameter of a light-emitting surface to the transmitting module.

Claim 10 (Withdrawn): A method of manufacturing a sleeve arranged between an optical fiber and a transmitting or receiving module for optically connecting the optical fiber and the transmitting or receiving module, said sleeve comprising:

a light-leading path being in a flat-headed conic shape having a small-diameter end face facing the transmitting or receiving module; a peripheral projecting portion projecting circularly in a radial direction from another end portion, being on a side of the optical fiber, of the light-leading path; and

an outer tube portion extending in an optical axis direction of the light-leading path from a peripheral portion of the peripheral projecting portion toward the small-diameter end face while covering an entire length of the light-leading path,

comprising the step of:

setting

a first metal mold having a first molding portion being along an external shape of said another end portion of the light-leading path of the sleeve and along an external shape of the outer tube portion and

a second metal mold having a second molding portion made of hard material and being along an inner surface of the outer tube portion and along a peripheral surface of the light-leading path.